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CLAIMS

1. A heat resistant product comprising a ceramic binder and vermiculite granules, wherein between 35% and 95% of the dry weight of the product is vermiculite having a particle size such that more than 60% of the vermiculite does not pass through a 1mm sieve.

5. The dry weight of the product is vermiculite having a particle size such that more than 60% of the vermiculite does not pass through a 1mm sieve.

10. A product according to claim 1, wherein 50%-95% of the dry weight of the product is vermiculite having a particle size such that more than 60% of the vermiculite does not pass through a 1mm sieve.

15. A product according to claim 1 or claim 2, wherein the product is substantially rigid.

20. A product according to ~~any of the preceding claims~~, wherein the binder comprises the adhesive part of a two part binder.

25. A product according to ~~any of claims 1 to 3~~, wherein the binder comprises the adhesive part of a two part binder, mixed with powdered vermiculite.

30. A product according to ~~any of the preceding claims~~, further comprising glass fibre or other fibrous material reinforcement.

35. A product according to ~~any of the preceding claims~~, wherein the vermiculite granules have a maximum dimension up to 15mm.

40. A product according to any preceding claim, which comprises voids which include trapped air.

45. A product according to ~~any of the preceding claims~~, wherein the product is sandwiched between load supporting sheets adhered to the product.

50. A product according to ~~any of the preceding claims~~ adhered onto the surface of an article.

55. A product according to ~~any of claims 1 to 8~~ moulded onto the surface of an article.

60. A product according to ~~any of claims 1 to 8~~ sprayed onto the surface of the article.

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A 13. A product according to claim 11 or claim 12, wherein the article comprises a honeycomb structure.

A 14. A product according to claim 13, further comprising a phenolic glass laminate sandwiched between the honeycomb structure and the product.

A 15. A product according to ^{claim 1} any of the preceding claims, wherein the vermiculite has a particle size such that more than 80% of the vermiculite does not pass through a 2mm sieve.

A 16. A fire wall comprising a heat resistant product according to ^{claim 1} any of the preceding claims.

A 17. A method of manufacturing a heat resistant product, the method comprising mixing vermiculite granules with a ceramic binder; and drying the mixture, wherein between 35% and 95% of the dry weight of the product is vermiculite having a particle size such that more than 60% of the vermiculite does not pass through a 1mm sieve.

A 18. A method according to claim 17, wherein the drying step comprises heating the mixture, or vacuum drying the mixture.

A 19. A method according to claim 17 or claim 18, wherein the mixture is held in a mould or press during the drying step.

A 20. A method according to claim 17 or claim 18, wherein the mixture is coated onto a surface of an article prior to the drying step.

A 21. A method according to ^{claim 17} any of claims 17 to 20, wherein the method is carried out in two steps, step 1 comprising coating the particles with a ceramic binder, and curing/drying the binder, and step 2 comprising coating the precoated particles with a ceramic binder, and curing/drying the binder.

A 22. A method according to claim 21, when dependent on claim 19, wherein step 2 is carried out with the mixture held in a mould or press.

A 23. A method according to ^{claim 17} any of claims 17 to 22, wherein 50%-90% of the dry weight of the product is vermiculite

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having a particle size such that more than 60% of the vermiculite does not pass through a 1mm sieve.

A 24. A method according to ^{claim 17} ~~any of claims 17 to 23~~, wherein the vermiculite has a particle size such that more than 80% of the vermiculite does not pass through a 2mm sieve.

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